## **ABSTRACT**

Said process used to obtain, in industrial scale, wet sheets and membranes of bacterial cellulose of high purity and specific physical and chemical properties, using the appropriate culture medium that is prepared in a mechanical mixer furnished with a jacket for temperature control and heat exchange, using selected recycled or nonrecycled inoculums, fermentation in covered trays with the temperature controlled by an external heating/cooling jacket through the circulation of hot/cold water, not requiring control of humidity and air renovation, collecting of the wet sheets that are then submitted to a process of purification and whitening by successive whirlpool washing and rinsing cycles using diverse heated or non-heated aqueous solutions, being afterwards forwarded to draining and drying/dehydration, passing through a semi-continuous system of rollers and belt conveyors made of absorbent material. This invention also refers to the process used to obtain compounded cellulosic wet sheets. When a wet sheet reaches a certain thickness, screens or other artifacts of diverse materials are added to the surface of the wet sheet already pre-formed so that in a second fermentation stage such screens and artifacts are covered by the cellulosic wet sheet, thus forming a compound product.